

# **“A STUDY OF CEREBROSPINAL FLUID CHLORIDE LEVELS IN MENINGITIS”**

## **ABSTRACT**

### **BACKGROUND**

Meningitis is a one of the important cause of morbidity and mortality worldwide. Still mortality is high especially in a developing country like ours. Hence prompt, early definite initiation of treatment could save lot of lives.

### **OBJECTIVES**

To substantiate already available investigations in aiding presumptive diagnosis of meningitis. The present study aims at determining whether CSF chloride could aid in differentiating meningitis etiologically.

### **METHODS**

100 patients diagnosed with meningitis segregated etiologically into bacterial /tuberculous/ viral/ fungal meningitis based on symptoms, clinical examination, investigations like complete CSF analysis and imaging . CSF chloride levels are estimated in all the study subjects.

### **RESULTS**

In our study, the mean value of CSF chloride in bacterial meningitis was found to be 117.19 mg/dl and tuberculous meningitis was found to be 114mg/dl, both reduced in comparison to viral meningitis. Statistical analysis was performed on these two variables using chi square test , a significant ‘ p’ value of <0.001 was obtained.

## **CONCLUSION**

CSF chloride levels can substantiate the diagnosis of meningitis and can be indicative, supporting the etiological diagnosis. CSF chloride is cheap readily available non-invasive investigation which could aid the physician in clearly differentiating the bacterial and other causes of meningitis.

## **KEYWORDS**

- Meningitis
- CSF chloride
- Differentiation